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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
09/290,046	04/12/99	IINO	A S004-3645

EXAMINER

MMC2/0602

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ART UNIT PAPER NUMBER

2834

DATE MAILED: 06/02/00

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

### OFFICE ACTION SUMMARY

☐ Responsive to communication(s) filed on \_\_\_\_\_

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

- ☒ Claim(s) 1-21 is/are pending in the application.  
Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
☐ Claim(s) \_\_\_\_\_ is/are allowed.  
☒ Claim(s) 1-21 is/are rejected.  
☐ Claim(s) \_\_\_\_\_ is/are objected to.  
☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.  
☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.  
☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.  
☐ The specification is objected to by the Examiner.  
☐ The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  
☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been received.  
☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_  
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

- ☒ Notice of Reference Cited, PTO-892  
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_  
☐ Interview Summary, PTO-413  
☒ Notice of Draftsperson's Patent Drawing Review, PTO-948  
☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

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Claims 15-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are vague and indefinite. A driving portion is a driving portion and a detecting portion is a detecting portion. The language of these claims seems to allow one structure to be both, simultaneously, which is not the structure defined by the claim language. It is thus unclear what structure is being defined and consequently the metes and bounds of the note that claims are undetermined in claims 15, 16, 18, 19, and 21 linen 1, "one" should be inserted between "any" and "of". Currently these claim are improper multidependent claims. Application of the prior art is on an "as understood" basis.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 2 and 15/1, 2-21/1, 2 rejected under 35 U.S.C. 102(a) as being clearly anticipated by Izukawa (figs. 2, 3 and 6-8), Kataoka (figs. 1, 2 and 7-9), Ohtsuchi (figs. 4, 5 26 & 27), or Takagi (fig. 4)..

Claims 3, 4, 10 and 15/3, 4-21/3, 4 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Izukawa, Kataoka or Ohtsuchi.

Claims 5 and 15/5-21/5 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Salomon, Shirasaki or Kataoka.

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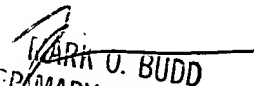
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-9, 11-14, and 15/6-21/6 rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki in view of Izukawa, Kataoka or Ohtsuchi. Okazaki teaches an ultrasonic motor using torsional and longitudinal vibrations but does not use a servo feed-back loop. Each of Izukawa, Kataoka and Ohtsuchi teach ultrasonic motors are more efficient and easier to control when provided with a feedback servo loop that uses a portion of a piezoelectric element as the detector. Thus for at least these reasons it would have been obvious to one of ordinary skill in the art to provide Okazaki with a piezoelectric feedback portion.

Further cited of interest are Suganuma, Iino, Atsuta and Endo.

Budd/dc  
June 1, 2000

  
MARK U. BUDD  
PRIMARY EXAMINER  
ART UNIT 212